

Richard Shi

Software Developer

Contact

647-261-7049 ☎

mail@richardshi.com ✉

richardshi.com 🌐

github.com/richardshi97 🐙

Skills & Technologies

Proficient

Java,
C, C++, Swift
Ruby, Javascript

Knowledgeable

Python, Bash, Objective-C
SQL(Postgres), Redis
Elixir
ARM Assembly

Tools

Git, svn
Trello, Gerrit, JIRA, Jenkins
GNU/Linux, MacOS
vim, Emacs
Android Studio, XCode
L^AT_EX

Education

University of Waterloo

Candidate for BAsC in
Computer Engineering
Sept 2015 – Apr 2020

Certifications

Oracle Certified Associate,

Java SE 7 Programmer

Summer 2015

Work Experience

Rave Media

Jan–Apr 2017

iOS Mobile Developer

- Redesigned and optimized the entire networking/REST layer of the social video app in Swift, **reducing request latency by 14%**
- Rewrote memory management of the app, reducing usage by **73%** overall
- Redesigned build system to **cut build times by 84%** and enable Swift frameworks
- Mentored less experienced interns Swift, software architecture, Git, etc.
- Led the simplified Chinese localization of the iOS app
- Performed code reviews, feature designs, bug and crash triaging, and Git branch management

Blackberry

May–Aug 2016

Camera Firmware Developer

- Optimized camera performance for prioritized camera apps, enabling **3X video resolution increase** at minimal performance loss
- Led the development of the Asia-model mandatory firmware shutter sound, enabling **sales in South Korea**
- Created camera component wiring diagrams for the Blackberry KeyOne phone
- Performed Gerrit code reviews, JIRA issue triaging, benchmarking, and won Foosball matches

Selected Personal Projects

ReactionBot.js

reactionbot-js.herokuapp.com

Node.js, Heroku, Express, PostgreSQL, Slack API, BotKit API, Dashbot API, WebSockets

- Created a chatbot for Slack that allows users to share images and memes with more than **30 engaged teams** since release
- Uses the Slack API with WebSockets on Express.js and PostgreSQL
- Initial version made with Ruby and Redis git.io/v9rJX

Path Polo - Hack the North 2016 Project

git.io/v9wlz

Android API, Java, Pebble API, Google Maps API

- An Android and Pebble watch app to guide the visually impaired using haptic feedback
- Directed users to locations chosen on Google Maps on phone or pebble app

Interests

Geopolitics & World History: President of high school Model United Nations Club; Actively organized lectures and mock debates for 30+ students for a Model United Nations Competition

Swimming (Certified Swimming Instructor), Piano, Strategy Games